

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Vignia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO | |
|---------------------------|----------------|----------------------|-------------------------|-----------------|--|
| 09/980,032 | 11/27/2001 | Thomas Arvidsson | 99002 UTAP | 8077 | |
| 7 | 590 09/15/2003 | | | | |
| Mark P Stone | | | EXAMINER | | |
| 25 Third Street 4th floor | | | LUGO, C | LUGO, CARLOS | |
| Stamford, CT | 06903 | | ART UNIT | PAPER NUMBER | |
| | | | 3677 | 3677 | |
| | | | DATE MAILED: 09/15/2003 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | | Application No. | Applicant(s) | | | |
|---|--|-------------------------|---|--|--|--|
| | | 09/980,032 | ARVIDSSON, THOMAS | | | |
| | | Examiner | Art Unit | | | |
| | | Carlos Lugo | 3677 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | | |
| 1)⊠ | Responsive to communication(s) filed on 271 | November 2001 . | | | | |
| 2a) <u></u> □ | This action is FINAL. 2b)⊠ Th | is action is non-final. | | | | |
| 3) | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4) 🖂 | Claim(s) 1-12 is/are pending in the application | l . | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) | Claim(s) is/are allowed. | | | | | |
| 6)⊠ | 6)⊠ Claim(s) <u>1-12</u> is/are rejected. | | | | | |
| 7) | Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| · · · | on Papers | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10)⊠ The drawing(s) filed on <u>27 November 2001</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a)⊠ All b)□ Some * c)□ None of: | | | | | | |
| | 1. Certified copies of the priority documents have been received. | | | | | |
| | 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | |
| <u>Attachmen</u> | t(<u>s</u>) | · | | | | |
| 2) Notic | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3</u> | 5) Notice of Informal I | r (PTO-413) Paper No(s) Patent Application (PTO-152) | | | |
| J.S. Patent and T | rademark Office | | | | | |



Art Unit: 3677

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the cross section having a length, which exceeds the peripheral length of a circle having a diameter being equal to the largest transverse dimension of the tube, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.
- Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the peripheral length of a circle" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the largest transverse dimension of the tube" in line

3. There is insufficient antecedent basis for this limitation in the claim.



Art Unit: 3677

Claim Rej ctions - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No 4,511,289 to Herron ('289).

Regarding claim 1, Herron ('289) discloses a tube formed rock bolt comprising an elongated tube (11), which in a cross section has a peripheral length, which exceeds the peripheral length of a circle having a diameter being equal to a largest transverse dimension of the tube. The bolt includes two end closures (13 and 14). One of the closures includes a passage (18) for pressurized the interior of the bolt in order to expand it. The tube has a varying material thickness in a peripheral direction (Figure 2).

As to claim 2, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

6. Claims 1,2,4,5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by GB Pat No 2,072,784 to Winston.

Regarding claim 1, Winston discloses a tube formed rock bolt comprising an elongated tube (10), which in a cross section has a peripheral length, which exceeds the -peripheral_length_of_a_circle_having_a_diameter_being_equal_to_a_largest_



Art Unit: 3677

transverse dimension of the tube. The bolt includes two end closures (20 and 24). One of the closures includes a passage (38) for pressurized the interior of the bolt in order to expand it. The tube has a varying material thickness in a peripheral direction (Figure 2).

As to claim 2, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

As to claims 4 and 7, Winston illustrates that the tube is symmetrical about two longitudinal sections, which are perpendicular relative to each other.

As to claim 5, Winston illustrates that the tube comprises a plurality of substantially triangularly formed stiff parts and intermediate U-shaped deformation parts (12).

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a), which forms the basis for all obviousness rejections, set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat No 4,511,289 to Herron ('289) in view of US Pat No 5,183,358 to Foulkes et al (Foulkes).

Herron ('289) fails to disclose that the bolt is made of an aluminum-based material.



Art Unit: 3677

Foulkes teaches that is known in the art to have an expandable member (12) made of aluminum.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use aluminum, as taught by Foulkes, into a device as described by Herron ('289), in order to use the characteristics of the material into the tube formed rock bolt.

9. Claims 3,6,8 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB Pat No 2,072,784 to Winston in view of US Pat No US Pat No 5,183,358 to Foulkes et al (Foulkes).

Regarding claims 3 and 6, Winston fails to disclose that the bolt is made of an aluminum-based material.

Foulkes teaches that is known in the art to have an expandable member (12) made of aluminum.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use aluminum, as taught by Foulkes, into a device as described by Winston, in order to use the characteristics of the material into the tube formed rock bolt.

As to claims 8 and 9, Winston illustrates that the tube is symmetrical about two longitudinal sections, which are perpendicular relative to each other.

As to claim 10-12, Winston illustrates that the tube comprises a plurality of substantially triangularly formed stiff parts and intermediate U-shaped deformation parts (12).

Page 6



Application/Control Number: 09/980,032

Art Unit: 3677

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lugo whose telephone number is 703-305-9747. The examiner can normally be reached on 9-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5771.

Carlos Lugo Examiner Art Unit 3677

September 2, 2003.

ROBERT J. SANDY PRIMARY EXAMINER